In the Claims:

1.   (Original) A resource allocation platform for allocating resources between a provider and a plurality of users for a resource allocation price, the resources being duration dependent resources, the platform comprising:

an agent-based interaction mechanism for allowing said provider and said plurality of users to indicate required and surplus resources, and

a pricing engine, associated with said interaction mechanism, for ascertaining a resource allocation price.

2.   (Original) The platform of claim 1, wherein the pricing engine comprises a learning mechanism for learning demand behavior of individual users, therefrom to provide said price.

3.   (Original) The platform of claim 2, wherein said demand behavior is an observed demand price curve for a respective user.

4.   (Original) The platform of claim 1, wherein said pricing engine further comprises a differentiation mechanism for altering said price by applying a user based differentiation policy to said price.

5.   (Original) The platform of claim 2, wherein said learning mechanism is a per-user neural network.

6.   (Original) The platform of claim 2, wherein said learning mechanism is a neural network assigned per a cluster of users.

7.   (Original) The platform of claim 2, wherein said demand behavior is an observed demand price behavior for a respective user, said resources comprise a plurality of different products and wherein said observed demand price behavior comprises a curve per product, said learning mechanism being operable to prepare a separate price-demand curve for each product.

8.   (Original) The platform of claim 1, wherein said resources are data communication capacity resources.

9.   (Original) The platform of claim 8, wherein said resources are one of a group comprising bandwidth, duration, rate access, CPU access, trunk access, cache memory, quality of service, and combinations thereof.

10.   (Original) The platform of claim 8, wherein said resources comprise a plurality of different products, each one of said products being defined by a respective duration and at least one of bandwidth, rate access, CPU access, trunk access, cache memory, and quality of service.

11.   (Original) The platform of claim 1, further comprising an allocation engine associated with said pricing engine, said allocation engine being operable to allocate available resources using rules, according to availability and according to respective resource cost outputs of said pricing engine.

12.   (Original) The platform of claim 11, wherein said allocation engine is operable to allocate resources into an allocation space.

13.   (Original) The platform of claim 11, wherein said allocation engine is operable to allocate capacity by maximizing an overall utility along a time continuum, wherein utility components for future points along said time continuum are calculated by including terms for probabilities of bids occurring at respective ones of said future points.

14.   (Original) The platform of claim 11, wherein said allocation engine is further operable to allocate said available resources in such a way as to maximize a predetermined utility function.

15.   (Original) The platform of claim 14, wherein said allocation engine is further operable to use feedback information of achieved utilities to enhance maximization of said predetermined utility function.

16.   (Original) The platform of claim 14, wherein said allocation engine is operable to carry out optimization of a mix within a group of products.

17.   (Original) The platform of claim 16, wherein said optimization comprises measuring changes in utility over changes in allocation between said products, and to allocate capacity from products showing lower changes in utility to products showing higher changes in utility.

18.   (Original) The platform of claim 1, wherein said agent-based interaction mechanism comprises a broker agent per user and a broker agent per provider.

19.   (Original) The platform of claim 18, wherein said agent based interaction mechanism further comprises an inter-provider broker agent.

20.   (Original) The platform of claim 1, wherein said agent-based interaction mechanism comprises broker agents for translating requests from respective users and providers into offers and bids, therewith to interact with other broker agents.

21.   (Original) The platform of claim 1, wherein said resources are apportionable into products being portions of a total amount of said resources and wherein said price engine is operable to build in a risk cost factor to respective products, such that said cost factor is inversely related to a size of a respective portion.

22.   (Original) The platform of claim 1, wherein said duration-based resources are apportionable into products having different time durations and wherein said price engine is operable to build in a risk cost factor to respective products such that said cost factor is inversely related to a size of a respective time duration.

23.   (Original) The platform of claim 1, wherein said duration-based resources are apportionable into products having different bandwidths and wherein

said price engine is operable to build in a risk cost factor to respective products such that said cost factor is inversely related to a size of a respective bandwidth.

24.   (Original) The platform of claim 22, wherein said duration-based resources are apportionable into products having different bandwidths and wherein said price engine is operable to build in a risk cost factor to respective products such that said cost factor is inversely related to a size of a respective bandwidth.

25.   (Original) A method of managing a time-dependent resource between at least one provider and a plurality of users, said method comprising:
        assigning a broker agent to each provider and each user to translate requests concerning said resource into offers and bids,
        using learned demand behavior of each user to assign a price to offers and bids concerning said user, and
        allocating resources according to a predetermined utility function based at least partly on said assigned prices.

26.   (Original) The method of claim 25, further comprising using further differential information of each user together with a provider pricing policy to arrive at said price.

27.   (Currently Amended) The method of ~~claims 25 or 26~~ claim 25, wherein said allocating resources is also determined according to a request for a minimum amount of the time-dependent resource.

28.   (Original) An interface, for interfacing between resource allocation platforms, said resource allocation platforms being for allocating resources between a provider and a plurality of users for a resource allocation price, the resources being duration dependent resources, at least one of the platforms comprising:
        an agent-based interaction mechanism for allowing said provider and said plurality of users to indicate required and surplus resources, and
        a pricing engine, associated with said interaction mechanism, for ascertaining a resource allocation price,
        the platforms interfacing with each other over junctions,

the interface comprising:

an agent for each platform at each junction, said agent being a part of a respective agent-based interaction mechanism, and further comprising an inter-platform protocol for exchanging resource allocation data with a corresponding agent of a respective interfacing platform, thereby to support inter-platform resource allocation across said junction.

29. (Original) The interface of claim 28, wherein said inter-platform protocol comprises a loop avoidance mechanism for preventing resource allocation data from looping between platforms.

30. (Original) The interface of claim 29, wherein said loop avoidance mechanism comprises assigning identification data to an instance of resource allocation data and wherein said protocol comprises making passing on said resource allocation data dependent upon a test of said identification data.

31. (Original) The interface of claim 30, wherein said identification data is a randomly generated number.

32. (Original) The interface of claim 31, wherein said randomly generated number is a relatively large number, thereby to reduce to negligible proportions the probability of two instances being assigned an identical number.

33. (Original) A resource allocation platform for allocating resources between a provider and a plurality of users according to a fixed price, the resources being duration dependent resources, the platform comprising:

an agent-based interaction mechanism for allowing said provider and said plurality of users to indicate required and surplus resources, and

an availability engine, associated with said interaction mechanism, for ascertaining a an amount of a resource to be allocated according to the fixed price.

34. (Original) The platform of claim 33, wherein said availability engine also ascertains said amount of said resource to be allocated according to a quality parameter.

35.   (Original) The platform of claim 34, wherein said quality parameter comprises a minimum amount of said resource.

36.   (Currently Amended) The platform of ~~claims 34 or 35~~ claim 34, wherein said quality parameter comprises quality of service.

37.   (Currently Amended) The platform of ~~any of claims 33-36~~ claim 33, wherein said availability engine ascertains said amount of said resource to be allocated also according to requesting said resource in advance of use.

38.   (Currently Amended) The platform of ~~any of claims 33-37~~ claim 33, wherein said availability engine ascertains said amount of said resource to be allocated also according to requesting said resource at a non-peak time of use.

39.   (Currently Amended) The platform of ~~any of claims 33-38~~ claim 33, wherein said resource comprises bandwidth on a network.